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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/027,428	12/19/2001	Bernd Luebcke	P01,0372	1858

26574 7590 12/17/2003

SCHIFF HARDIN & WAITE  
6600 SEARS TOWER  
233 S WACKER DR  
CHICAGO, IL 60606-6473

EXAMINER
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CRENSHAW, MARVIN P

ART UNIT	PAPER NUMBER
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2854

DATE MAILED: 12/17/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/027,428

Applicant(s)

LUEBCKE, BERND

Examiner

Marvin P. Crenshaw

Art Unit

2854

AW

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on the amendment filed 9/22/03.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 December 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All   b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)                      4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)                      5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_                      6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1,3,9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Buechler in view of Bornhorst, Jr. et al.

Buechler teaches a cooling device (Fig. 1) for cooling an engraving system of an engraving device for engraving printing forms comprising engraving head (30) carried by a support and a cooling unit (60 & 62) substantially complete in and of themselves, where one cooling unit is allocated to one engraving head.

However, Buechler doesn't teach having a plurality of engraving heads. Bornhorst, Jr. et al. teaches having a plurality of engraving heads (Fig. 1,22 and 24). It would be obvious to provide Buechler with a plurality of engraving heads, as taught by Bornhorst, Jr. et al. so as to more efficiently provide a multiple engraving head system to handle more jobs.

With respect to claim 3, Buechler teaches a cooling device wherein the heat pipes have a liquid medium (See Col. 5 lines 50 - 60) flowing there through.

With respect to claim 9, Buechler teaches the engraving device (Fig. 1) comprises a printing form cylinder for rotogravure.

With respect to claim 10, Buechler teaches a method for cooling an engraving system (Fig.1) of an engraving device for engraving printing forms comprising an individual cooling system for an engraving head with its own respective cooling unit.

However, Buechler doesn't teach providing the engraving system with a plurality of engraving heads respectively carried by supports.

Bornhorst, Jr. et al. teaches providing an engraving system with a plurality of engraving heads (Fig. 1, 22 and 24) respectively carried by supports. It would be obvious to provide Buechler with a plurality of engraving heads, as taught by Bornhorst, Jr. et al. so as to more efficiently provide a multiple engraving head system to handle more jobs.

Claims 2,4,5 – 8 and 11 – 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Buechler as modified by Bornhorst, Jr. et al as applied to claims 1,3,9 and 10 above, and further in view of Kurz.

With respect to claims 2 and 11, Buechler as modified by Bornhorst, Jr. et al. doesn't teach a device wherein each cooling unit contains a heat exchanger with a heat pipe whose one end projects into a region of the device.

Kurz teaches a device wherein each cooling unit (12 and 14) contains a heat exchanger with a heat pipe (line flowing into water pan) whose one end projects into a region of the device. It would have been obvious to further modify Buechler to have a heat exchanger with a heat pipe as a cooling device as taught by Kurz for cooling means for cooling the engraving head of an engraving cylinder.

With respect to claims 4 and 13, Buechler as modified by Bornhorst, Jr. et al. doesn't teach the heat pipes having a gaseous medium flowing through them. Kurz teaches the heat pipes having a gaseous medium (45) flowing through them.

It would have been obvious to further modify Buechler to have the heat pipes having a gaseous medium flowing through them as taught by Kurz to have as another means for cooling the engraving heads.

With respect to claims 5 and 15, Buechler as modified by Bornhorst, Jr. et al. doesn't teach a cooling device that employs a rapid action coupling (24) to connect at least two heat exchangers of the cooling device to another, at least one thereof being connected to the engraving system and that they are attached to a support.

Kurz teaches a cooling device that employs a rapid action coupling (24) to connect at least two heat exchangers of the cooling device to another, at least one thereof being connected to the engraving system and that they are attached to a support.

It would have been obvious to further modify Buechler to have a rapid action coupler as a connection means as taught by Kurz for switching means between the two heat exchangers.

With respect to claim 7, 14 and 16, Buechler as modified by Bornhorst, Jr. et al. doesn't teach a cooling device comprising at least one cooling circulation connecting at least two heat exchangers of the cooling device to one another at least one thereof being connected to the printing system.

Kurz teaches a cooling device comprises at least one cooling circulation connecting (68) at least two heat exchangers of the cooling device to one another at least one thereof being connected to the printing system.

It would have been obvious to further modify Buechler to have a heat exchanger as a cooling device as taught by Kurz for cooling means for cooling the engraving head of an engraving cylinder.

With respect to claim 8 and 17, Buechler as modified by Bornhorst, Jr. et al. doesn't teach that the cooling device is flooded with air.

Kurz teaches a cooling device that is flooded with air (45). It would have been obvious to further modify Buechler to have a cooling device flooded with air as taught by Kurz for another resource cooling means for cooling the engraving head of an engraving cylinder.

### ***Response to Arguments***

Applicant's arguments filed September 22, 2003 have been fully considered but they are not persuasive. Specifically, Buechler teaches a cooling system for an engraving head. Also, Bornhorst, Jr. et al. has been added to teach the use of having multiple engraving heads in an engraving system.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marvin P. Crenshaw whose telephone number is (703) 308-0797. The examiner can normally be reached on Monday - Friday 7:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Hirshfeld can be reached on (703) 305-6619. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 308-7724 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

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Art Unit: 2854

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MPC  
December 15, 2003



Dan Colilla  
Primary Examiner  
Art Unit 2854